

ARTICLE III

Public and Environmental Health Review Regulations and Standards for Selected Site Development Activities or Other Special Conditions, or for Other Than Single-Family Dwelling on Single Lot**§ 305-3.1. Authority.**

This regulation is adopted under MGL c. 111, § 31, which gives the Board of Health (hereafter designated as "the Board") authority to make reasonable health regulations, violations for which shall be punished by a fine of not more than \$300. This regulation is also adopted under MGL c. 111, § 122, which directs the Board of Health to examine into all nuisances, sources of filth, and causes of sickness within its Town which may, in its opinion, be injurious to the public health and to destroy, remove, or prevent the same as case may require. This regulation is also adopted under MGL c. 111, § 143.

§ 305-3.2. Purpose.

- A. These regulations are intended to protect the public and environmental health, provide adequate water supply and wastewater treatment, and ensure that there will be adequate protection against flooding, siltation, and other drainage problems.
- B. These regulations are also intended to make certain that earth removal projects will:
 - (1) Maintain a depth to groundwater which is adequate for the construction of subsurface wastewater disposal systems under both local regulations and the State Environmental Code;¹ and
 - (2) Not be injurious to water supply; and
 - (3) Be carried out so as to provide adequate protection against flooding, siltation, and other drainage problems.

§ 305-3.3. Jurisdiction.

- A. Environmental health impact report ("EHIR").
 - (1) Any of the following activities requires submittal of a complete EHIR to the Board of Health:
 - (a) An application to construct 10 or more dwelling units served by an existing or proposed private way or by a common driveway, right-of-way, or traveled way;
 - (b) An application for approval of a subdivision plan;
 - (c) An application for approval of an open space residential subdivision under the Town of Sherborn Zoning Bylaw, § 240-4.5;
 - (d) An application for all or part of a project with a design sewage flow of 2,000 gallons per day or greater;

1. Editor's Note: See 310 CMR.

- (e) An application for approval of a planned unit development (PUD) special permit as set forth in the Town of Sherborn Zoning Bylaw, § 240-4.6;
 - (f) An application for approval of a comprehensive permit under MGL c. 40B, §§ 20 to 23; and/or
 - (g) Any plans that involve removal of sod, loam, clay, sand, gravel, stone (whether quarried or not) or other natural material from the premises of a property or project exceeding a volume of 350 cubic yards in total.
- (2) The EHIR report shall not be accepted for review by the Board of Health unless such report meets the criteria required by this and all other applicable Board of Health regulations that provides specific information relative to the operation of the proposed sewage treatment and disposal systems, including soil conditions, surface drainage calculations, hydrogeologic descriptions of groundwater resources and movement, effects of precipitation, and wastewater treatment methodology. None of the activities listed in this § 305-3.3A may commence until the Board of Health has completed its review of the EHIR and, if required by this section, an environmental health permit has been issued.
- (3) In accordance with the objectives of 314 CMR 5.09, the applicant shall undertake a hydrogeological investigation to assess the impact of any proposed sewage or wastewater discharge on all potentially impacted groundwater sources of potable water and to determine whether the proposed discharge will cause or contribute to a violation of 314 CMR 4.00 (Massachusetts Surface Water Quality Standards), or impair the actual or potential use of the groundwater as a source of potable water. Private well areas, as present throughout Sherborn, are acknowledged as sensitive receptors by MassDEP. Impact estimation shall be performed by employing a site-specific mass balance analysis of the area of impact [in accordance with MassDEP's Guidelines for Title 5 Aggregation of Flow and Nitrogen Loading (February 22, 2016) associated with 310 CMR 15.216] or a comparable approach approved by the Board. The impacts of other septic effluent contaminants shall also be assessed; calculated nitrogen impacts may be used as a proxy, with appropriate adjustments. Quality parameters beyond those regulated by MA drinking water standards (e.g., emerging contaminants of concern) may be required for consideration at the discretion of the Board, based upon specific circumstances of the project, such as anticipated sewage or wastewater characteristics.
- (4) In accordance with 314 CMR 5.10(3), requirements shall be established to assure that no pollutants shall be discharged in an amount or concentration that would impair the use of the groundwater as an actual or potential source of potable water, or that negatively impact surface waters for their existing and designated uses or maintenance of 314 CMR 4.00 (Massachusetts Surface Water Quality Standards). The EHIR and other project information shall be used by the Board to establish additional effluent limitations and/or require the implementation of additional measures to protect the groundwater. Such additional effluent limitations and methods may include, but are not limited to, limitations on the total pounds of certain contaminants discharged to the site per calendar year, limitations on parameters in addition to nitrate nitrogen, best management practices, and tight-tank requirements for selected waste streams.

- B. Environmental health permit. The applicant for any project that meets the criteria stated above shall be required to obtain an environmental health permit from the Board of Health.
- C. All other projects. All other projects within the jurisdiction of the Board of Health and which require approval from the Board of Health shall be required to meet the standards and criteria which are set forth in §§ 305-3.8, 305-3.12 and 305-3.13B.

§ 305-3.4. Burden of proof.

Any applicant required to file an EHIR with the Board shall have the burden of proving by submission of clear and convincing evidence that the proposed work shall not have unacceptable, significant individual or cumulative effect upon the public or environmental health.

§ 305-3.5. Definitions.

BOARD — Board of Health.

PERSON — Every individual, partnership, corporation, firm, association, group, or governmental entity, owning property or carrying on an activity subject to this regulation.

PROJECT — In determining whether a project is subject to EHIR, semipublic water supply categorization, and/or other requirements of Article III, the Board of Health shall consider the entirety of the project, including but not limited to any likely future expansion, and not separate segments thereof. The following criteria are considered when determining whether the various work or activities constitute one project, including but not limited to whether the work or activities, taken together, comprise a common plan, regardless of whether there is more than one proponent or lot; any time interval between the work or activities; and whether the environmental health impacts caused by the work or activities are separable or cumulative. Phasing or other forms of project segmentation shall not evade, defer, or curtail application of Board of Health regulations pertaining to larger projects.

§ 305-3.6. Applications for permits.

A. General.

- (1) Written application shall be filed with the Board for all activities that come under the jurisdiction of this regulation. The application shall include such information and plans as are necessary by the Board to describe the proposed activities and their effects upon the public health and the environment. No such activities shall commence without receiving and complying with a permit issued by the Board pursuant to these regulations.
- (2) The EHIR shall be filed with the Board of Health within 24 hours of any other filings or applications to any municipal boards or commissions (see Subsection B).

B. Other applications.

- (1) The Board may, in appropriate cases, accept as part of the application and plans under this regulation the following filings to other municipal boards or commissions:
 - (a) Notice of intent filed with the Conservation Commission.

- (b) Building permit application filed with the Building Inspector.
 - (c) Earth removal permit application filed with the special permit granting authority.
 - (d) Preliminary and definitive plans and planned unit development applications filed with the Planning Board.
- (2) In such case, additional information shall be required when applicable to provide the complete submittal requirements of this regulation.

C. Fees.

- (1) At the time of application or request to the Board, the applicant shall pay a filing fee as may be set from time to time by the Board.
- (2) In addition to the filing fee, the Board shall require the applicant to pay reasonable costs and expenses borne by the Board of Health or other Town agencies for specific expert engineering and consultant services deemed necessary by the Board to review the applications. Said payment can be required at any point in the deliberations prior to a final decision being rendered. Said services may include, but are not necessarily restricted to, general engineering analysis, hydrogeologic and drainage analysis, and legal advice, including public health and environmental land use law.

§ 305-3.7. Water supply.

- A. The proposed source of water supply shall provide water of a quantity and quality in accordance with Town, state, and federal water supply standards for use. In the case of sites to be served by on-site wells, a hydrogeological evaluation showing groundwater flow directions and the proposed placement of wells and septic systems. Zones of contribution to wells shall be delineated except for the following: single- or two-family dwellings; single-family residential subdivisions; or projects where the required well yield is 1,375 gallons per day or less. This evaluation shall be performed by a qualified engineer or geologist, at the expense of the applicant, to be reviewed by the Board of Health for this determination.
- B. For semipublic water supplies, sufficient provisions shall exist to ensure future ownership and/or control over the protective area for each well, as established per Article II, § 305-2.6G, and associated land uses therein shall be limited to those directly related to the provision of water or shall have no significant adverse impact on the availability or quality of water for drinking, human contact, cleaning, water-using infrastructure, agriculture, and other uses. The Board may require additional protective measures that are determined to be suitable, customary, appropriate, or reasonable in serving or maintaining the interests of water quantity or quality.

§ 305-3.8. Sewage disposal.

The applicant shall submit evidence that:

- A. The proposed location of the project has soil conditions suitable for the subsurface disposal of sanitary or other applicable types of wastewaters in accordance with the regulations of the Board of Health along with all applicable state and federal regulations.

- B. Wastewater disposal shall meet the strictest minimum standards of current Commonwealth of Massachusetts or federal regulations of surface waters or groundwaters. For any subdivision having 10 or more dwelling lots or any project having a minimum design wastewater flow of 2,000 gallons per day, a hydrogeological evaluation shall be performed by a qualified engineer or geologist, at the expense of the applicant, to be reviewed by the Board of Health for this determination. Hydrogeological evaluations shall include determination of geologic stratigraphy, determination of groundwater flow directions, determination of maximum groundwater elevation, determination of minimum groundwater elevation when relevant, evaluation of water table mounding, and prediction of down-gradient water quality impacts. Maximum groundwater elevation shall be determined by direct observation during the season of the year when the water table is high as determined by the Board and as adjusted by the method described in "U.S. Geological Survey, Water Resources Investigations, Open File Report 80-1205 – Probable High Groundwater Levels in Massachusetts," or subsequent revisions thereof.

§ 305-3.9. Special industrial and commercial requirements.

- A. These regulations shall apply to any and all industrial or commercial projects or for any other project except for the construction of single- and two-family dwellings. These regulations shall also apply to industrial or commercial operations conducted on residential dwelling property of any size, and also to any hobbyist operation that utilizes materials on the Massachusetts Substance List.
- B. A single party of responsibility shall be designated for the proposed project and shall be the applicant of record. The single party of responsibility shall be the owner of the subject building or facility and shall not be an individual tenant therein. All applications for permits from the Board of Health shall be submitted by this responsible party. All limitations and conditions with regards to any waste, wastewater or atmospheric discharge shall be the responsibility of the responsible party, who shall see that all tenants operate within the limitations and conditions of the permits issued. The Board of Health reserves the right to take whatever appropriate action might be necessary against an individual tenant. However, the Board of Health shall hold the responsible party as the entity of primary responsibility.
- C. Septic tanks serving any commercial or industrial facility shall have the contents of the septic tank serving the facility sampled and tested on an annual basis for volatile organic compounds (EPA 624) and pH, as well as any other parameters required by the Board of Health on a case-by-case basis. The sampling shall be performed and the results submitted to the Board of Health without having to be requested. The sample shall be taken in the time period of March, April, or May of each year and the results submitted to the Board of Health prior to July 1.
- D. All floor drains, except as serving only sanitary facilities, shall be discharged to a tight collection tank and taken away by a licensed waste hauler. Such floor drains shall not be discharged to a septic system, storm drain, dry well, or other surface or subsurface discharge point.
- E. The Board of Health may, on a case-by-case basis, require that each tenant of a multiuse facility shall have a separate discharge point to the septic system. Each such discharge shall

be equipped with a flow meter. Where water usage records will accurately reflect the wastewater discharge, a water usage meter may be acceptable. Otherwise, it will be required to install an effluent or discharge meter.

- F. Applicants for facilities subject to this regulation which require Board of Health project evaluation shall complete the Board of Health operations information questionnaire, which is available from the Board of Health office.
- G. All facilities that store, use, manufacture, or discharge any materials, compounds, or chemicals that are on the Massachusetts Substance List shall file a contingency plan with the Board of Health. It shall be updated on an annual basis or when any changes are made in such items.

§ 305-3.10. Bedrock disruption.

"Bedrock" disruption means any activity performed upon ledge or bedrock, including, but not limited to, hammering, drilling, and blasting, and any other activity that breaks up and/or removes portions of ledge or bedrock; bedrock disruption shall not include water well drilling. The following requirements shall apply to bedrock disruption in excess of 10 cubic yards:

- A. A permit shall be required prior to any bedrock disruption activities in excess of 10 cubic yards being conducted on a property or as part of a project. A permit application form must be completed and submitted to the Board.
- B. No permit shall be granted except after the applicant has notified all owners of any property within 0.25 miles, including properties outside the Town of Sherborn, if applicable, by certified mail, return receipt requested, at his/her own expense at least 10 days before the Board of Health meeting at which the permit request will be on the agenda. The notification shall notice that such owners may conduct baseline water quality sampling and analysis for select metals and nitrate. Guidance for accepted content for the notification shall be available from the Board of Health. The notification shall be received by the covered property owners at least four weeks prior to the commencement of bedrock disruption activity.
- C. If blasting is to be performed, the applicant shall provide information regarding the composition of the blasting agent to be used to the Board of Health. A safety data sheet for the blasting agent shall be acceptable if all ingredients are disclosed. Blasting agents containing perchlorate shall not be permitted.
- D. A permit shall not be issued until there is acceptable completion of the above requirements and satisfactory review of the blasting agent's composition.

§ 305-3.11. (Reserved)

§ 305-3.12. Drainage.

- A. The proposed drainage for a subdivision or project shall not cause an increase of more than 10% nor a decrease of more than 10% in either the total volume of runoff discharged off-site, or total rate of runoff discharged off-site, as compared with the respective discharge off-site prior to the development. Such condition shall be required for storms of two-, ten-, and

100-year frequency events.

- B. No channelization of surface runoff shall be allowed off-site without the written consent of the owner of the land affected, in the form of a permanent grant of easement, recorded at the Registry of Deeds.
- C. In cases where runoff infiltration cannot, in the opinion of the Board of Health, be appropriately implemented because of the possibility of contamination of water supply, or because of extremely poor infiltrative and permeability characteristics of the soil, the requirement as regards volume may be waived by the Board of Health, provided the applicant provides such additional preventive measures to prevent any increase in elevation or duration of downstream flood elevations. Such additional measures may be, but are not restricted to, the construction of compensatory flood storage facilities and/or the creation of additional wetlands.
- D. If detention or retention ponds are utilized, slopes shall be no steeper than four horizontal to one vertical, and design water depth shall not exceed three feet. Minimum bottom slope for dry detention areas shall be 2%.
- E. "Poor infiltrative and permeability conditions" are defined as a soil permeability of less than 1×10^{-4} centimeters per second. Unless, in the opinion of the Board of Health, such testing is not applicable for a particular site, all permeability tests shall be in-situ field bore hole tests for permeabilities in the acceptable range as specified above. If permeability testing is desired to be performed in soils of lesser permeability, laboratory tests for hydraulic conductivity shall be performed on undisturbed samples by the Falling Head Permeability Test using flexible membrane triaxial test cells with back pressure (Army Corps of Engineering Manual EM 1110-2-1906, Appendix VII).
- F. The stormwater management design shall include a control strategy and plan for best management practice (BMP) for any particular development or project and shall accomplish the following goals:
 - (1) Reproduce, as nearly as possible, the hydrological conditions in the groundwater and surface waters prior to development.
 - (2) Provide the best level of removal for urban pollutants using BMPs.
 - (3) Have an acceptable future maintenance burden.
 - (4) Have a neutral effect on the natural and human environment.
 - (5) Be appropriate for the site, given physical constraints.
 - (6) Provide a sufficient level of health and environmental protection during the construction phase.
- G. Design of BMPs and infiltration and detention structures shall be according to procedures acceptable to the Board of Health such as are described in the publications entitled:
 - (1) "Controlling Urban Runoff – A Practical Manual for Planning and Designing Urban BMPs," Department of Environmental Programs, Metropolitan Washington Council of

Governments.

- (2) "Underground Disposal of Storm Water Runoff – Design Guidelines Manual," February 1980, Federal Highway Administration, Department of Transportation, which is similar to:
 - (a) "Recharge Basins for Disposal of Highway Storm Drainage," Research Report 69-2, of the New York Department of Transportation.
 - (b) American Society of Civil Engineers Publication entitled "Design of Urban Runoff Quality Controls," ISBN 0-87262-695-4.
 - (c) American Society of Civil Engineers Publication entitled "Urban Runoff Quality – Impact and Quality Enhancement Technology," ISBN 0-87262-577-X, 1986.
 - (d) "Erosion and Sediment Control in Site Development – Massachusetts Conservation Guide – Volume 1."

§ 305-3.13. Earth removal standards.

- A. Submittal requirements. Plans for any proposed earth removal operation exceeding 350 cubic yards of material per project shall be filed with the Board of Health and shall contain the following information and meet the following criteria:
 - (1) An earth removal restoration plan, prepared by a registered engineer or registered land surveyor, at a scale of 80 feet to the inch or larger, containing all information necessary to evaluate the site, the proposed earth removal operation, and the proposed restoration of the site after the operation is complete, including the following:
 - (2) Location of the perimeter of the proposed excavation;
 - (3) Property lines, abutting owners of record, and buildings or other structures on the property or within 200 feet of the site boundaries or within 500 feet of the earth removal operation site;
 - (4) Private wells within 1,000 feet and public wells within 2,640 feet of the earth removal operation site;
 - (5) Location of walls, fences, test pits, test borings, observation wells with logs, streams and pools, and wetlands on the site;
 - (6) At least three permanent bench marks, with elevations thereon, used in topographical surveying, and referenced to the NGVD datum;
 - (7) Adjacent public streets, private ways, and service roads;
 - (8) The perimeter and topography of any existing excavation as of the date of the application;
 - (9) Depth of removal within the area, shown by five-foot contours or other contour interval found to be appropriate by the Board, and final spot elevations;

- (10) Proposed lateral support to all adjacent property;
- (11) Proper provision for safe and adequate water supply and sanitary sewage disposal, and for temporary and permanent drainage on the site;
- (12) Topography shown by five-foot contours or other contour interval found to be appropriate by the Board, and spot elevations of the area of removal as restored and to at least 200 feet beyond the perimeter of that area;
- (13) The location and method to be used in providing permanent drainage and erosion and sediment control;
- (14) Location of proposed lot lines, if any, as shown on a preliminary or definitive subdivision plan filed with the Planning Board of the Town.
- (15) Evidence that health and safety concerns have been adequately addressed with provisions that shall be maintained throughout the proposed operation.

B. Standards.

- (1) To provide for potential subsurface sewage disposal systems, no excavation shall occur closer than 10 feet to the maximum groundwater elevation, as determined by the procedure described in § 305-3.8 of this regulation;
- (2) There shall be no increase or decrease of surface water flow off the site;
- (3) There shall be no potential adverse effect on public health or safety, or the health or safety of persons living, working, or otherwise present in the neighborhood, due to excessive noise, dust, or any other condition that may result from the proposed operation;
- (4) There shall be no potential adverse impact on surface waters, public or private wells as a result of the proposed operation;
- (5) Lateral support shall be maintained for all adjacent properties, and no banks shall be left after completion of operations with a slope that exceeds one foot vertical rise in four feet of horizontal distance;
- (6) Any access to an excavated area or areas shall be adequately posted with "Keep Out," "Danger" signs;
- (7) During operations, any excavation, quarry, bank, or work face having a depth of 10 feet or more and/or creating a slope of more than 30° downward shall be fenced. Such fence shall be located 10 feet or more from the upper edge of the excavation and shall be at least six feet in height;
- (8) No boulders in excess of a volume of 20 cubic yards and no trees or stumps or demolition or construction waste materials shall be buried on-site;
- (9) Notwithstanding any standard otherwise required in this regulation, the operation and restoration shall comply with the standards contained in the Massachusetts Conservation Guide, Volumes I and II, United States Department of Agriculture,

Natural Resources Conservation Service;

- (10) At the time of restoration, the areas subject to this regulation shall be covered with a minimum of four inches of compacted topsoil and seeded with an appropriate grass or legume.

§ 305-3.14. Environmental health impact report: scope and general submittal requirements.

Plans submitted pursuant to this regulation shall include but not be limited to the following:

- A. Proposed source of water supply.
- B. Data for a sufficient number of test holes, soil logs, maximum groundwater elevations, and properly conducted percolation tests to:
 - (1) Demonstrate clearly that the soil conditions are generally suitable for subsurface sewage disposal and will meet the needs of the project. In the case of a subdivision, each and every lot shall be shown to be suitable for such purpose.
 - (2) To determine the pattern of groundwater flow.
- C. A topographical map of the property, with contours referring to mean sea level, showing the location and elevation of all test holes, how the surface drainage is to be handled, including nearby affected areas, and all pertinent physical features, including ponds, swamps, wetlands, water supplies, seasonal watercourses, swales, areas of ledge and rock. Also, wherever applicable, an overlay of flood plain, drainage watershed areas, USDA soil map characterization for soil type and hydrologic group, USDA soil limitations for septic tank sewage disposal, and aquifer designation.
- D. Sufficient data to demonstrate no deleterious individual or cumulative impact of subsurface sewage disposal upon groundwater quality. Failure to do so may result in findings by the Board of Health that such affected lots cannot be used for building sites without injury to the public health.
- E. Hydrologic and hydraulic calculations and data to support the proposed design for the runoff drainage system. Both volume and flow rate of runoff, before and after development, must be clearly stated and shall be in accordance with the specifications previously designated herein. Calculations shall be performed using the most recent procedures of the USDA Natural Resources Conservation Service such as are described in TR-20 "Computer Program for Project Formulation-Hydrology" (SCS 1983), National Engineering Handbook, Section 4, Hydrology (SCS 1985), and Technical Release No. 55 "Urban Hydrology for Small Watersheds" (SCS 1986). Structure design shall comply with the standards of USDA NRCS Publication TR-60 for containments for detention and retention areas. Additional design guidelines may be on file with the Board of Health. **[Amended 7-17-2024]**
- F. Evidence to demonstrate clearly to the Board of Health that water supply shall be adequate as previously designated herein.
- G. Evidence to demonstrate clearly to the Board of Health that the effect on groundwater and surface waters shall be in accordance with the specifications previously designated herein.

- H. In order for a plan subject to these regulations to be considered complete, it shall include all items required by these regulations, including an appropriate fee that may be set from time to time by the Board of Health. Incomplete submittals shall be returned as incomplete forthwith to the applicant, following a vote of disapproval by the Board of Health, without review. The plan must then be resubmitted and be subject to Board of Health review to demonstrate that it meets all Board of Health requirements before it shall be considered approved.
- I. Failure to submit adequate or correct data or information as required will constitute grounds for Board of Health denial of the permit for the project site as a whole or of individual lots or portions therein.

§ 305-3.15. Other permits.

No well permits or disposal works construction permits shall be granted for any project subject to this regulation until the Board has issued the environmental health permit.

§ 305-3.16. Findings required.

Prior to granting a permit under these regulations, the Board shall make findings with supporting documentation. The Board may issue the environmental health permit, based on the review of the impacts of the project documentation as specified in this regulation, if said Board finds that the proposed project will comply with all of the standards of this regulation.